Amendment To The Claims

1. (currently amended) A bacterial strain for production of a fermentation product selected from the group consisting of antibiotics, organic acids, amino acids, proteins, vitamins, polyhydroxyalkanoates, and polysaccharides, wherein the bacterial strain is genetically modified to express a heterologous nuclease gene ~~or mutated to improve the activity of a homologous or heterologous nuclease gene,~~ wherein the nuclease gene product is secreted into the periplasmic space ~~or culture medium~~ and released when the bacteria is lyzed by osmotic shock ~~in an amount effective to degrade at least 95% of all of the nucleic acid released following lysis of the cells in less than 24 hours and reduce the viscosity of a cell lysate in a bacterial cell culture having a density of at least 50 g/l so that recovery of the product is enhanced~~.

2. (currently amended) The bacterial strain of claim 1 wherein the nuclease gene product is released in an amount effective to degrade at least 95% of all of the nucleic acid released following lysis of the cells in less than 24 hours and reduce the viscosity of a cell lysate in a bacterial cell culture having a density of at least 50 g/l so that recovery of the product is enhanced ~~which is capable of growth to cell densities of at least 50g/l~~.

3. (original) The bacterial strain of claim 2 which produces a polyhydroxyalkanoate to levels of at least 40% of its dry cell weight.

4. (previously presented) The bacterial strain of claim 1 for use in an aqueous process to manufacture poly(3-hydroxyalkanoate) granule suspension which is essentially free of nucleic acids.

5. (original) The bacterial strain of claim 1 for use in a process for making polysaccharides selected from the group consisting of xanthan gum, alginates, gellan gum, zooglan, hyaluronic acid, and microbial cellulose.

6. (original) The bacterial strain of claim 1 wherein the nuclease gene is a heterologous gene obtained from an organism other than the bacterial strain.

7. (currently amended) A bacterial strain for production of a fermentation product selected from the group consisting of antibiotics, organic acids, amino acids, proteins, vitamins, polyhydroxyalkanoates, and polysaccharides, wherein the bacterial strain is genetically modified to express a heterologous nuclease gene, wherein the nuclease gene product is secreted into the periplasmic space and released when the bacteria is lyzed by osmotic shock, wherein ~~The bacterial strain of claim 1 in which~~ the nuclease gene is integrated into a host strain selected from the group consisting of *Ralstonia eutropha, Methylobacterium organophilum, Methylobacterium extorquens, Aeromonas caviae, Azotobacter vinelandii, Alcaligenes latus, Pseudomonas oleovorans, Pseudomonas fluorescens, Pseudomonas putida, Pseudomonas aeruginosa, Pseudomonas acidophila, Pseudomonas resinovorans, Escherichia coli,* and *Klebsiella.*

8. (original) The bacterial strain of claim 1 wherein the nuclease is expressed in an amount effective to degrade at least 95% of all of the nucleic acid released following lysis of the cells in less than 24 hours.

9-10. (cancelled)

11. (withdrawn – currently amended) A fermentation process comprising

adding to a growth medium a bacterial strain for production of a fermentation product selected from the group consisting of antibiotics, organic acids, amino acids, proteins, vitamins, polyhydroxyalkanoates, and polysaccharides, wherein the bacterial strain is genetically modified to express a heterologous nuclease gene ~~or mutated to improve the activity of a homologous or heterologous nuclease gene~~, wherein the nuclease gene product is secreted into the periplasmic space ~~or culture medium~~ and released when the bacteria is lyzed by osmotic shock ~~in an amount effective to degrade at least 95% of all of the nucleic acid released following lysis of the cells in less than 24 hours and reduce the viscosity of a cell lysate in a bacterial cell culture having a density of at least 50 g/l so that recovery of the product is enhanced~~.

12. (withdrawn, currently amended) The method of claim 11, wherein the bacterial strain is grown to cell densities of at least 50 g/l, and the nuclease gene product is released in an amount effective to degrade at least 95% of all of the nucleic acid released following lysis of the cells in less than 24 hours and reduce the viscosity of a cell lysate in a bacterial cell culture having a density of at least 50 g/l so that recovery of the product is enhanced.

13. (previously presented) The bacterial strain of claim 1 wherein the bacterial strain produces a polyhydroxyalkanoate.

14. (withdrawn, currently amended) The method of claim ~~13~~ 12 further comprising growing the bacterial strain to produce levels of at least 40% of its dry cell weight.

15. (withdrawn, original) The method of claim 11 further comprising lysing the cells.

16. (withdrawn, original) The method of claim 14 further comprising using an aqueous process to manufacture a poly(3-hydroxyalkanoates) granule suspension which is essentially free of nucleic acids.

17. (withdrawn, original) The method of claim 11 used in a process for making polysaccharides selected from the group consisting of xanthan gum, alginates, gellan gum, zooglan, hyaluronic acid, and microbial cellulose.

18. (previously presented) The bacterial strain of claim 1 wherein the fermentation product is a protein and the protein is selected from the group consisting of enzymes, growth factors, and cytokines.

19. (withdrawn, currently amended) ~~The~~ A fermentation process comprising adding to a growth medium a bacterial strain for production of a fermentation product selected from the group consisting of antibiotics, organic acids, amino acids, proteins, vitamins, polyhydroxyalkanoates, and polysaccharides, wherein the bacterial strain is genetically modified to express a heterologous nuclease gene, wherein the nuclease gene product is secreted into the periplasmic space and released when the bacteria is lyzed by osmotic shock, and ~~method of claim 11~~ wherein the nuclease gene is integrated into a host strain selected from the group consisting of *Ralstonia eutropha, Methylobacterium organophilum, Methylobacterium extorquens, Aeromonas caviae, Azotobacter vinelandii, Alcaligenes latus, Pseudomonas oleovorans, Pseudomonas fluorescens, Pseudomonas putida, Pseudomonas aeruginosa, Pseudomonas acidophila, Pseudomonas resinovorans, Escherichia coli,* and *Klebsiella.*

20. (cancelled)

21. (withdrawn, currently amended) The method of claim 11 wherein the strain expresses nuclease into the periplasmic space ~~growth medium~~ in an amount effective to degrade at least 95% of all of the nucleic acid released following lysis of cells ~~in the growth medium~~ in less than 24 hours.

22-23. (cancelled)